

Title (en)

PYROTECHNIC MIXTURES GENERATING NON-TOXIC GASES BASED ON AMMONIUM PERCHLORATE

Title (de)

AMMONIUMPERCHLORAT ENHALTENDE, PYROTECHNISCHE ZUSAMMENSETZUNGEN ZUM GENERIEREN VON EINES NICHTTOXISCHEN GASES

Title (fr)

COMPOSITIONS PYROTECHNIQUES GENERATRICES DE GAZ NON TOXIQUES A BASE DE PERCHLORATE D'AMMONIUM

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Application

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Abstract (en)

[origin: US6533878B1] The invention concerns pyrotechnic mixtures generating non-toxic gases characterised in that they essentially consist of a cross-linkable reducing binder based on epoxy resin or silicone resin, an oxidising filler based on ammonium perchlorate and a chlorine scavenger such as sodium nitrate and energetic additives consisting of a cupric compound such as cupric oxide or basic copper nitrate and of a nitrogenated organic compound such as, for example, nitroguanidin or guanidine nitrate. The filler can also contain potassium perchlorate. Said compositions burn at moderate temperatures generating gases rich in nitrogen and poor in nitrogen oxides and carbon monoxide. They are most suitable as pyrotechnic load for gas generators designed to inflate protective air bags for motor vehicle passengers.

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